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Subject: State poised to shut down 11 local oil injection wells

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## State poised to shut down 11 local oil injection wells



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By Casey Christie / The Californian

An oil pump jack is hard at work around sunset next to the bike path in Bakersfield.

## BY JOHN COX Californian staff writer icox@bakersfield.com

Seven independent oil companies have been ordered to halt state-approved wastewater injection work starting noon Monday out of concern they may be contaminating Kern County drinking water.

Emergency orders issued Wednesday by the California Division of Oil, Gas and Geothermal Resources apply to 11 disposal wells east and northeast of Bakersfield. About 100 water wells are located within a mile radius of the disposal wells.

Oil and water officials say the wells may have injected "produced water" -- the toxic and sometimes radioactive liquid that comes up during oil production -- and possibly injected fracking fluid at relatively shallow depths that contain relatively low salinity, oil-free water suitable for drinking and irrigation.

State officials said they have found no evidence the underground injections, some approved by DOGGR as long ago as the 1970s and others very recently, have ever contaminated drinking or irrigation water. Pollution has not been ruled out, however, as regulators conduct site inspections and await test results and other information from the companies.

DOGGR's action has come amid a year-old crackdown on industry practices for disposing of oil field fluids. But the orders are distinct in that recent scrutiny has originated with regional water

officials focused not on injection wells but oil companies' misuse of unlined sumps and drilling pits.

There is an added sensitivity because agricultural water users and others are drilling everdeeper wells to cope with the drought.

"We need to make sure that the water that they're going after, if it's potable now, let's make sure that it stays that way and we're not injecting produced water," said Jason Marshall, chief deputy director of DOGGR's parent agency, the state Department of Conservation.

Some operators subject to the emergency orders said the actions may cause a hardship unless they are able to resolve the matter quickly. Without somewhere to deposit waste fluids, they may have to cease production altogether, which could lead to layoffs.

"This is somewhat shocking," said Dwayne Roach, president of Bakersfield's Pace Diversified Corp. He insisted his operation is injecting produced water back into the same zone, or depth, it came from, "so I'm not sure how that can be viewed as contaminating it."

Marshall acknowledged finding at least one "mix-up" where an operator may have been issued an emergency cease-and-desist order even though the injection zone was appropriate for waste disposal. He said that's why the division is asking for water samples and other information about the wells.

"There are going to be some instances, I think, where operators' records do not match division records," he said.

The attorney for another Bakersfield oil producer that received an emergency order, Longbow LLC, said the company hopes to clear up possible misunderstandings about at least one of two wells listed in the letter it received from DOGGR before the action takes effect Monday. If not, attorney Jean Pledger said, Longbow will have to haul its waste fluids to an appropriate disposal site.

Another Bakersfield company under the emergency order, SOC Resources Inc., was less concerned. Operations Manager Tim Jordan said the well at issue had "never been used," and so the order "doesn't affect us."

The other companies that received DOGGR's emergency orders last week are Bakersfield-based CMO Inc., Santa Monica-based Macpherson Operating Co. LP, Camarillo's R&R Resources LLC and Redbank Oil Co.

The oil fields affected by the orders -- Edison, Kern Front and Mt. Poso -- are located relatively close to Bakersfield, not in western Central Valley areas believed to have little or no water requiring protection.

California injection disposal work has become a frequent topic in recent years as DOGGR has worked to address federal criticism it has not lived up to the terms of a 1982 agreement with the U.S. Environmental Protection Agency.

A 2011 audit commissioned by the EPA faulted several aspects of the division's oversight of what are known as Underground Injection Control Class II disposal projects. It said DOGGR

was being too lenient about what kind of water should be protected, how wide a radius well operators must study before injecting and how much pressure can be applied.

DOGGR has said it plans to overhaul its rules for such work within the next few years after finishing new rules on fracking, the controversial well-stimulation technique also known as hydraulic fracturing, which is not regulated under of the injection control program.

The Central Valley Regional Water Quality Control Board issued orders Wednesday concurrent with DOGGR's action. Its letters to the same seven companies set deadlines for turning over groundwater samples, analytical data and technical reports.

"Our orders are focused on the (geological) formation where the injection happened and looking at the quality of that formation water," said Jonathan Bishop, chief deputy director for the State Water Resources Board.

Fortunately, he said, it appears a "large proportion" of the wells' injection zones are at a much deeper depth than the nearby water wells.

While that's "good news," he said, the state lacks data on many of the surrounding private wells.

Inspectors are trying to gather such information now, he added.

But some of the injection wells at issue seem to be within 500 feet of the depth of the water wells.

"That is of more concern to us," he said.